Gamma Radiation Dose Rate Conversions

	roentgen per hour (R/h)	rem per hour (rem/h)	sievert per hour (Sv/h)	gray per hour (Gy/h)	centigray per hour (cGy/h)	rad per hour (rad/h)	rem per hour (without prefixes) (rem/h)	sievert per hour (without prefixes) (Sv/h)
	1 µR/h	1 µrem/h	10 nSv/h 0.01 µSv/h	0.01 µGy/h	0.000001 cGy/h	1 µrad/h	0.000001 rem/h	0.00000001 Sv/h
Bkg	10 µR/h	10 µrem/h	100 nSv/h 0.10 µSv/h	0.10 µGy/h	0.000010 cGy/h	10 µrad/h	0.000010 rem/h	0.00000010 Sv/h
	50 µR/h	50 µrem/h	0.50 µSv/h 500 nSv/h	0.50 µGy/h	0.000050 cGy/h	50 µrad/h	0.000050 rem/h	0.00000050 Sv/h
	100 µR/h 0.1 mR/h	100 µrem/h 0.1 mrem/h	1000 nSv/h 1 µSv/h	1 µGy/h	0.00010 cGy/h	100 µrad/h	0.00010 rem/h	0.0000010 Sv/h
	500 µR/h	500 µrem/h	5 µSv/h	5 µGy/h	0.00050 cGy/h	500 µrad/h	0.00050 rem/h	0.0000050 Sv/h
	750 µR/h	750 µrem/h	7.5 µSv/h	7.5 µGy/h	0.00075 cGy/h	750 µrad/h	0.00075 rem/h	0.0000075 Sv/h
SET UP HOT LINE CAUTION	1000 µR/h 1 mR/h	1000 µrem/h 1 mrem/h	10 µSv/h	10 µGy/h	0.0010 cGy/h	1000 µrad/h 1 mrad/h	0.0010 rem/h	0.000010 Sv/h
	2 mR/h	2 mrem/h	20 µSv/h	20 µGy/h	0.0020 cGy/h	2 mrad/h	0.0020 rem/h	0.000020 Sv/h
	5 mR/h	5 mrem/h	50 µSv/h	50 µGy/h	0.0050 cGy/h	5 mrad/h	0.0050 rem/h	0.000050 Sv/h
	7.5 mR/h	7.5 mrem/h	75 µSv/h	75 µGy/h	0.0075 cGy/h	7.5 mrad/h	0.0075 rem/h	0.000075 Sv/h
	10 mR/h	10 mrem/h	100 µSv/h 0.1 mSv/h	100 µGy/h 0.1 mGy/h	0.010 cGy/h	10 mrad/h	0.010 rem/h	0.00010 Sv/h
WORK IN HOT ZONE CAUTION	20 mR/h	20 mrem/h	200 µSv/h	200 µGy/h	0.020 cGy/h	20 mrad/h	0.020 rem/h	0.00020 Sv/h
	30 mR/h	30 mrem/h	300 µSv/h	300 µGy/h	0.030 cGy/h	30 mrad/h	0.030 rem/h	0.00030 Sv/h
	40 mR/h	40 mrem/h	400 µSv/h	400 µGy/h	0.040 cGy/h	40 mrad/h	0.040 rem/h	0.00040 Sv/h
	50 mR/h	50 mrem/h	500 µSv/h	500 µGy/h	0.050 cGy/h	50 mrad/h	0.050 rem/h	0.00050 Sv/h
	75 mR/h	75 mrem/h	750 µSv/h	750 µGy/h	0.075 cGy/h	75 mrad/h	0.075 rem/h	0.00075 Sv/h
DANGER	100 mR/h 0.1 R/h	100 mrem/h 0.1 rem/h	1000 µSv/h 1 mSv/h	1000 µGy/h 1 mGy/h	0.10 cGy/h	100 mrad/h	0.10 rem/h	0.0010 Sv/h
	200 mR/h	200 mrem/h	2 mSv/h	2 mGy/h	0.20 cGy/h	200 mrad/h	0.20 rem/h	0.0020 Sv/h
	300 mR/h	300 mrem/h	3 mSv/h	3 mGy/h	0.30 cGy/h	300 mrad/h	0.30 rem/h	0.0030 Sv/h
	400 mR/h	400 mrem/h	4 mSv/h	4 mGy/h	0.40 cGy/h	400 mrad/h	0.40 rem/h	0.0040 Sv/h
	500 mR/h	500 mrem/h	5 mSv/h	5 mGy/h	0.50 cGy/h	500 mrad/h	0.50 rem/h	0.0050 Sv/h
DANGER	750 mR/h	750 mrem/h	7.5 mSv/h	7.5 mGy/h	0.75 cGy/h	750 mrad/h	0.75 rem/h	0.0075 Sv/h
	1000 mR/h 1 R/h	1000 mrem/h 1 rem/h	10 mSv/h	10 mGy/h	1.0 cGy/h	1000 mrad/h 1 rad/h	1.0 rem/h	0.010 Sv/h
	1.5 R/h	1.5 rem/h	15 mSv/h	15 mGy/h	1.5 cGy/h	1.5 rad/h	1.5 rem/h	0.015 Sv/h
	2 R/h	2 rem/h	20 mSv/h	20 mGy/h	2 cGy/h	2 rad/h	2 rem/h	0.02 Sv/h
	3 R/h	3 rem/h	30 mSv/h	30 mGy/h	3 cGy/h	3 rad/h	3 rem/h	0.03 Sv/h
DANGER	4 R/h	4 rem/h	40 mSv/h	40 mGy/h	4 cGy/h	4 rad/h	4 rem/h	0.04 Sv/h
	5 R/h	5 rem/h	50 mSv/h	50 mGy/h	5 cGy/h	5 rad/h	5 rem/h	0.05 Sv/h
	7.5 R/h	7.5 rem/h	75 mSv/h	75 mGy/h	7.5 cGy/h	7.5 rad/h	7.5 rem/h	0.075 Sv/h
LIFE-SAVING ONLY DANGER	10 R/h	10 rem/h	100 mSv/h	100 mGy/h	10 cGy/h	10 rad/h	10 rem/h	0.10 Sv/h
	20 R/h	20 rem/h	200 mSv/h	200 mGy/h	20 cGy/h	20 rad/h	20 rem/h	0.20 Sv/h
	30 R/h	30 rem/h	300 mSv/h	300 mGy/h	30 cGy/h	30 rad/h	30 rem/h	0.30 Sv/h
	40 R/h	40 rem/h	400 mSv/h	400 mGy/h	40 cGy/h	40 rad/h	40 rem/h	0.40 Sv/h
	50 R/h	50 rem/h	500 mSv/h	500 mGy/h	50 cGy/h	50 rad/h	50 rem/h	0.50 Sv/h
	75 R/h	75 rem/h	750 mSv/h	750 mGy/h	75 cGy/h	75 rad/h	75 rem/h	0.75 Sv/h
	100 R/h	100 rem/h	1000 mSv/h 1 Sv/h	1000 mGy/h 1 Gy/h	100 cGy/h	100 rad/h	100 rem/h	1 Sv/h
VOLUNTEERS 0GRAVE DANGER	200 R/h	200 rem/h	2 Sv/h	2 Gy/h	200 cGy/h	200 rad/h	200 rem/h	2 Sv/h
	300 R/h	300 rem/h	3 Sv/h	3 Gy/h	300 cGy/h	300 rad/h	300 rem/h	3 Sv/h
	400 R/h	400 rem/h	4 Sv/h	4 Gy/h	400 cGy/h	400 rad/h	400 rem/h	4 Sv/h
	500 R/h	500 rem/h	5 Sv/h	5 Gy/h	500 cGy/h	500 rad/h	500 rem/h	5 Sv/h
	750 R/h	750 rem/h	7.5 Sv/h	7.5 Gy/h	750 cGy/h	750 rad/h	750 rem/h	7.5 Sv/h
	1000 R/h	1000 rem/h	10 Sv/h	10 Gy/h	1000 cGy/h	1000 rad/h	1000 rem/h	10 Sv/h

Notes: This table is intended to help convert and compare gamma radiation exposure and dose rate readings taken with different types of meters.
It assumes the following conversion factors for gamma ray dose rates are used: 1 R/h = 1 rad/h = 1 rem/h and 1 Sv/h = 100 rem/h and 1 Gy/h = 100 rad/h.
Meters using the traditional "special units" (R, rem, rad) often use abbreviate "hour" as "hr," while meters using SI units (Sv, Gy) often use "h" for "hour."
Natural Background radiation levels are usually around 5 to 25 µR/h (0.05 to 0.25 µSv/h), and are represented by the row labeled "Bkg" 10 µR/h (100 nSv/h).

Gamma Radiation Dose Rate Conversions

	roentgen per hour (R/h)	rem per hour (rem/h)	sievert per hour (Sv/h)	gray per hour (Gy/h)	centigray per hour (cGy/h)	rad per hour (rad/h)	rem per hour (without prefixes) (rem/h)	sievert per hour (without prefixes) (Sv/h)
	1 µR/h	1 µrem/h	10 nSv/h 0.01 µSv/h	0.01 µGy/h	0.000001 cGy/h	1 µrad/h	0.000001 rem/h	0.00000001 Sv/h
Bkg	10 µR/h	10 µrem/h	100 nSv/h 0.10 µSv/h	0.10 µGy/h	0.000010 cGy/h	10 µrad/h	0.000010 rem/h	0.00000010 Sv/h
	50 µR/h	50 µrem/h	0.50 µSv/h 500 nSv/h	0.50 µGy/h	0.000050 cGy/h	50 µrad/h	0.000050 rem/h	0.00000050 Sv/h
	100 µR/h 0.1 mR/h	100 µrem/h 0.1 mrem/h	1000 nSv/h 1 µSv/h	1 µGy/h	0.00010 cGy/h	100 µrad/h	0.00010 rem/h	0.0000010 Sv/h
	500 µR/h	500 µrem/h	5 µSv/h	5 µGy/h	0.00050 cGy/h	500 µrad/h	0.00050 rem/h	0.0000050 Sv/h
	750 µR/h	750 µrem/h	7.5 µSv/h	7.5 µGy/h	0.00075 cGy/h	750 µrad/h	0.00075 rem/h	0.0000075 Sv/h
SET UP HOT LINE CAUTION	1000 µR/h 1 mR/h	1000 µrem/h 1 mrem/h	10 µSv/h	10 µGy/h	0.0010 cGy/h	1000 µrad/h 1 mrad/h	0.0010 rem/h	0.000010 Sv/h
	2 mR/h	2 mrem/h	20 µSv/h	20 µGy/h	0.0020 cGy/h	2 mrad/h	0.0020 rem/h	0.000020 Sv/h
	5 mR/h	5 mrem/h	50 µSv/h	50 µGy/h	0.0050 cGy/h	5 mrad/h	0.0050 rem/h	0.000050 Sv/h
	7.5 mR/h	7.5 mrem/h	75 µSv/h	75 µGy/h	0.0075 cGy/h	7.5 mrad/h	0.0075 rem/h	0.000075 Sv/h
	10 mR/h	10 mrem/h	100 µSv/h 0.1 mSv/h	100 µGy/h 0.1 mGy/h	0.010 cGy/h	10 mrad/h	0.010 rem/h	0.00010 Sv/h
WORK IN HOT ZONE CAUTION	20 mR/h	20 mrem/h	200 µSv/h	200 µGy/h	0.020 cGy/h	20 mrad/h	0.020 rem/h	0.00020 Sv/h
	30 mR/h	30 mrem/h	300 µSv/h	300 µGy/h	0.030 cGy/h	30 mrad/h	0.030 rem/h	0.00030 Sv/h
	40 mR/h	40 mrem/h	400 µSv/h	400 µGy/h	0.040 cGy/h	40 mrad/h	0.040 rem/h	0.00040 Sv/h
	50 mR/h	50 mrem/h	500 µSv/h	500 µGy/h	0.050 cGy/h	50 mrad/h	0.050 rem/h	0.00050 Sv/h
	75 mR/h	75 mrem/h	750 µSv/h	750 µGy/h	0.075 cGy/h	75 mrad/h	0.075 rem/h	0.00075 Sv/h
DANGER	100 mR/h 0.1 R/h	100 mrem/h 0.1 rem/h	1000 µSv/h 1 mSv/h	1000 µGy/h 1 mGy/h	0.10 cGy/h	100 mrad/h	0.10 rem/h	0.0010 Sv/h
	200 mR/h	200 mrem/h	2 mSv/h	2 mGy/h	0.20 cGy/h	200 mrad/h	0.20 rem/h	0.0020 Sv/h
	300 mR/h	300 mrem/h	3 mSv/h	3 mGy/h	0.30 cGy/h	300 mrad/h	0.30 rem/h	0.0030 Sv/h
	400 mR/h	400 mrem/h	4 mSv/h	4 mGy/h	0.40 cGy/h	400 mrad/h	0.40 rem/h	0.0040 Sv/h
	500 mR/h	500 mrem/h	5 mSv/h	5 mGy/h	0.50 cGy/h	500 mrad/h	0.50 rem/h	0.0050 Sv/h
DANGER	750 mR/h	750 mrem/h	7.5 mSv/h	7.5 mGy/h	0.75 cGy/h	750 mrad/h	0.75 rem/h	0.0075 Sv/h
	1000 mR/h 1 R/h	1000 mrem/h 1 rem/h	10 mSv/h	10 mGy/h	1.0 cGy/h	1000 mrad/h 1 rad/h	1.0 rem/h	0.010 Sv/h
	1.5 R/h	1.5 rem/h	15 mSv/h	15 mGy/h	1.5 cGy/h	1.5 rad/h	1.5 rem/h	0.015 Sv/h
	2 R/h	2 rem/h	20 mSv/h	20 mGy/h	2 cGy/h	2 rad/h	2 rem/h	0.02 Sv/h
	3 R/h	3 rem/h	30 mSv/h	30 mGy/h	3 cGy/h	3 rad/h	3 rem/h	0.03 Sv/h
	4 R/h	4 rem/h	40 mSv/h	40 mGy/h	4 cGy/h	4 rad/h	4 rem/h	0.04 Sv/h
	5 R/h	5 rem/h	50 mSv/h	50 mGy/h	5 cGy/h	5 rad/h	5 rem/h	0.05 Sv/h
	7.5 R/h	7.5 rem/h	75 mSv/h	75 mGy/h	7.5 cGy/h	7.5 rad/h	7.5 rem/h	0.075 Sv/h
LIFE-SAVING ONLY DANGER	10 R/h	10 rem/h	100 mSv/h	100 mGy/h	10 cGy/h	10 rad/h	10 rem/h	0.10 Sv/h
	20 R/h	20 rem/h	200 mSv/h	200 mGy/h	20 cGy/h	20 rad/h	20 rem/h	0.20 Sv/h
	30 R/h	30 rem/h	300 mSv/h	300 mGy/h	30 cGy/h	30 rad/h	30 rem/h	0.30 Sv/h
	40 R/h	40 rem/h	400 mSv/h	400 mGy/h	40 cGy/h	40 rad/h	40 rem/h	0.40 Sv/h
	50 R/h	50 rem/h	500 mSv/h	500 mGy/h	50 cGy/h	50 rad/h	50 rem/h	0.50 Sv/h
	75 R/h	75 rem/h	750 mSv/h	750 mGy/h	75 cGy/h	75 rad/h	75 rem/h	0.75 Sv/h
	100 R/h	100 rem/h	1000 mSv/h 1 Sv/h	1000 mGy/h 1 Gy/h	100 cGy/h	100 rad/h	100 rem/h	1 Sv/h
VOLUNTEERS GRAVE DANGER	200 R/h	200 rem/h	2 Sv/h	2 Gy/h	200 cGy/h	200 rad/h	200 rem/h	2 Sv/h
	300 R/h	300 rem/h	3 Sv/h	3 Gy/h	300 cGy/h	300 rad/h	300 rem/h	3 Sv/h
	400 R/h	400 rem/h	4 Sv/h	4 Gy/h	400 cGy/h	400 rad/h	400 rem/h	4 Sv/h
	500 R/h	500 rem/h	5 Sv/h	5 Gy/h	500 cGy/h	500 rad/h	500 rem/h	5 Sv/h
	750 R/h	750 rem/h	7.5 Sv/h	7.5 Gy/h	750 cGy/h	750 rad/h	750 rem/h	7.5 Sv/h
	1000 R/h	1000 rem/h	10 Sv/h	10 Gy/h	1000 cGy/h	1000 rad/h	1000 rem/h	10 Sv/h

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